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ABSTRACT

The broad area selected by the Calgary Project was the development of a curriculum on urban aesthetics. During their work in 1970-71, they concluded that the best way to develop visual awareness was through the conceptual development of the visual components or the images and elements of design in terms of human values of urban areas. The modular units will be entitled: 1) Portals: points of access; 2) Skyline and Profile; 3) Focal Point and Landmarks; 4) Nodes: strategic points, gathering places; 5) Pathways: streets, rivers, railroads; 6) Edges and Entities: city segments; and, 7) Aura and Pulse: total sensual impressions. The elements of design are: scale, color, line, form, texture, and motion. The total program could range from five to ten months. The material should be suitable for any learner above the sixth grade level in several existing subject areas: art education, social studies, sociology, geography, home economics, and environmental studies; to a lesser degree in: design studies, building arts, and history. The learning experiences of a unit will be entirely self-contained in a kit which will provide the basis for open inquiry on the topic. The open-ended student-directed investigation activities in his community should involve application of the unit to the school, the home, the neighborhood, and then the entire city. The expansion of the curriculum framework was influenced by a review of the works of urban designers included here. (Author/SBE)

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Face of the City

June 1971

Western Curriculum Project on Canada Studies

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FACE OF THE CITY

This face you got,
This here phizzog you carry around
You never picked it out for yourself at all at all - did you?
This here phizzog - somebody handed it to you - am I right?
Somebody said, "Here's yours, now go see what you can do with it."
Somebody slipped it to you and it was like a package marked
"No goods exchanged after being taken away."
This face you got.

Carl Sandburg

FACE OF THE CITY:

How to look at your Urban World

(a curriculum proposal)

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CALGARY SUB-PROJECT
PROJECT CANADA WEST
JUNE, 1971

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1. CONSULTANTS TO THE PROJECT:

Evamy, Michael E. - honours diploma of Architecture from Northern Polytechnic, London. Professional registrations, Royal Architectural Institute of Canada, Alberta Association of Architects, Royal Institute of British Architects. Partner of Cohos, Delesalle and Evamy, Calgary.

Mr. Evamy has advised the project in urban aesthetics and architectural form in urban planning.

Loban, Conrad M. - graduate of Northern Polytechnic, London. Professional registrations, Royal Architectural Institute of Canada, Alberta Association of Architects, Royal Institute of British Architects. Principal Architect of Alberta Department of Public Works, Calgary.

Mr. Loban has advised the project in urban aesthetics and architectural form in urban planning.

Carswell, Ronald - Assistant Professor, Curriculum and Instruction, Faculty of Education, University of Calgary; Teacher-Education Consultant, High School Geography Project, Boulder Colorado; publications on the teaching of Geography.

Dr. Carswell has advised the project on curriculum development and evaluation techniques.

King, Stanley - Artist-Architect, founder of Vancouver Centre for Participation in Environmental Design; designer of teaching materials for Canadian elementary and high school urban studies; conducting research in environmental awareness, assisted by the Canada Council.

Dr. King contributed an emphasis on the visual approach to urban design with an assessment of public taste. Children can be made aware of what is in their urban world and led to inquire into what ought to be.

Wolfe, Myer R. - Professor, Department of Urban Planning, College of Architecture and Urban Planning, University of Washington; Visiting lecturer at: Royal Academy of Fine Arts, Denmark; University of British Columbia; Virginia Polytechnic Institute; University of Kansas; University of Illinois; University of Texas; University of North Carolina; University of Louisiana State; Wayne State University.

Professor Wolfe established a list of determinants concerning the visual images of the city. The aesthetics of the city lies in the total structure not in surface treatment. Urban aesthetics cannot be just a cosmetic.

2. RATIONALE FOR SELECTION AND DEVELOPMENT OF URBAN AESTHETICS

Canadians are moving to urban settings at an accelerating pace. The Economic Council of Canada states that

> "by 1980 eight out of ten Canadians will be urban residents, and six out of ten will be concentrated in 29 metropolitan areas of 100,000 and over. Over the next decade the pace of urbanization in Canada will continue to be the highest among the major industrial countries of the world". [1.]

As never before, urban education in its broadest sense should occupy a place in Canadian school curricula.

The Economic Council describes the present urban situation in these terms:

> "Shortages and an inadequacy of urban housing, traffic and transport problems, air and land pollution, a confused jumble of conflicting land uses, decaying neighbourhoods and monotonous suburbs, urban poverty and social disturbance, steadily rising property tax burdens and the frustrations of municipal administration--these are familiar burdens to the average Canadian dweller today." [2.]

An examination of the literature of aesthetics, philosophy of art, and art history discloses a conception of art that can be used in dealing with environmental regions as a work of art. This conception, which can be found in both traditional and modern analytical studies,

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1. Economic Council of Canada, Fourth Annual Review; The Canadian Economy From the 1960's to 1970's, Ottawa, Queen's Printer 1967, p. 223.

2. Ibid; p. 191.

holds that works of art are most usefully interpreted as artifacts produced primarily for aesthetic consideration. 1. An analysis of "aesthetic consideration" reveals that any "thing" and not only "man-produced artifacts", can be viewed aesthetically. While cities are not designed primarily for aesthetic experience, cities, including their natural and man-produced phenomena, are in fact experienced aesthetically more than is commonly realized. It is being learned painfully that the "aesthetic form" of a city may be an important instrumental factor in either articulating or degrading the human spirit. The current unrest in cities suggests that the slogan "survival by design" may be more than just a cliche'.

To say a city should be designed in such a manner that it can be regarded aesthetically is to say that

1. the city's sensory aspects (shapes, sounds, and colors)
2. its formal aspects (patterns and rhythms), and
3. its expressive aspects (symbolic and metaphoric)

should be vivid and interesting to perception and participation. This is not to suggest that urban planning should be based on purely aesthetic considerations. For while the immediate purpose of a city is not to feed intrinsic perception, the actual consequences of a city's form, style and dynamics is to affect in many and varied ways the mind and emotions of men. Once this has been accepted, it points to the need for aesthetic urban education.

It is generally believed that the urban scene in Canada is unique and that we may be in the position of being able to develop the

> "art of building big cities. We approach this task of expressing ourselves as an urban people with a fairly clean canvas. We do not inherit the massive confusion and ugliness that accompanied the first wave of industrialization in European and American cities, in the age of coal-fired factories and grimy tenements. Projected straight into the age of clean fuels, cellophane packaging and a car with almost every bungalow, we have nothing to escape but our own inadequacy. And, for the first time in our history, most of the coming generation city householders will

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1. D. W. Gotshalk, Art and the Social Order (New York: Dover Publications 1962); J. O. Urmson, "What Makes A Situation Aesthetic?" Proceedings of the Aristotelian Society (Supplementary Volume) 31:75-92 (1957); Erwin Panofsky, Meaning in the Visual Arts (New York: Doubleday Anchor Books, 1955); Virgil C. Aldrich, Philosophy of Art (Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1963).

be people who were themselves born or brought up in cities, either in Canada or in another country." 1.

Because of this unique vantage point, Canadian aesthetic urban education might lead to cities which articulate the human spirit.

People have been living in cities for a long time and the task of city building has been the vocation of a great many professional people: architects, town planners, and public administrators.

> "One might expect that there would have emerged some fairly clear ideas about the kind of environment that would best serve the purposes of city people, both collectively and individually. The public might well imagine that the elite of the city-building professions has been carefully collecting and checking evidence on the relationship between urban forms and human objectives and thereby formulating worthwhile goals. But as two distinguished authorities on town planning have pointed out, such an expectation 'would bring a wry smile to the face of anyone familiar with the actual state of the theory of the physical environment'. Professors Kevin Lynch and Lloyd Rodwin, working at Harvard and M.I.T. observe that there has been no systematic evaluation of the whole range of urban forms in relation to human objectives." 2.

Does this point to the necessity in a democratic society, of citizens being able to identify and articulate those human objectives for the city, so that cities allow for the "good life"?

If the articulation of human objectives means in part the articulation of human aesthetic objectives then schools have a definite role. They must prepare youth for the articulation of human aesthetic objectives so that cities may develop where the minds and emotions of men may be nourished.

Before citizens can develop a commitment to the aesthetic dimension of their urban world, which undeniably involves a sense of environmental responsibility, the first step towards that commitment has to be on the receiving and awareness level. 3. The project members firmly believe that aesthetic education in Canadian schools has not been able to develop the transfer of aesthetic

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1. Humphrey Carver, Cities in the Suburbs, University of Toronto Press, 1962, p. 5.

2. Ibid, p. 5.

3. D. R. Krathwohl, B. S. Bloom and B. B. Masia, Taxonomy of Educational Objectives; Handbook II, The Affective Domain, 1964, pp. 176-185.

consideration to the urban form. It is felt that too often the studio approach used by most art educators has neglected to impart an awareness of aesthetics in all aspects of daily living. [1] While it has been noted that common elements are involved in looking at works of art and in regarding cities aesthetically, the relation between the aesthetic and the extra-aesthetic in the case of the city, is fundamentally different from that in a painting or piece of sculpture. We believe that for the above reasons there should be a new curricular design for urban aesthetic education. While the project designers are adamant that FACE OF THE CITY should design materials to develop awareness of the aesthetic dimension of the city, they are hopeful that other projects will develop in the area of helping students identify courses of action for urban change and prepare them for their role as decision makers in a democratic urban environment. We cannot envisage this role until students are more aware of the aesthetic aspect of their urban world. They must first be taught to <u>see</u> the urban form as George Kennan said in his memoirs,

> "no one, to the day of my graduation, had ever taught me to look understandingly at a painting, or a tree, or the facade of a building."

There could be no clearer statement on the need for aesthetic education than:

> "There was a time when all man-made things were produced by craftsmen who understood the materials they used and the shapes they created. Their methods of workings were changed to meet changing conditions and, steadily improving, were passed on from one generation to the next. This living tradition was shattered by the Industrial Revolution, when handicraft was replaced by powerful forces which no one seemed able to control effectively. The buildings in which people lived and worked and the objects they used in daily life broke with the past and assumed totally new shapes. At the same time large numbers of mechanical devices were invented, so that man's environment was changed and distorted to an extent quite unprecedented. We have now passed through what some people regard as the First Machine Age, and we are about to reap the benefits brought by science and technology. We have learnt to exert a certain amount of control over our world, over our surroundings and the lives we lead within them. But although we have gained much we have probably lost even more. We no longer possess the knowledge and the understanding to judge the things we make: our houses and factories, our implements and machines, our cities and roads. Because of this failure in judgement, we often find ourselves surrounded with such ugliness as would

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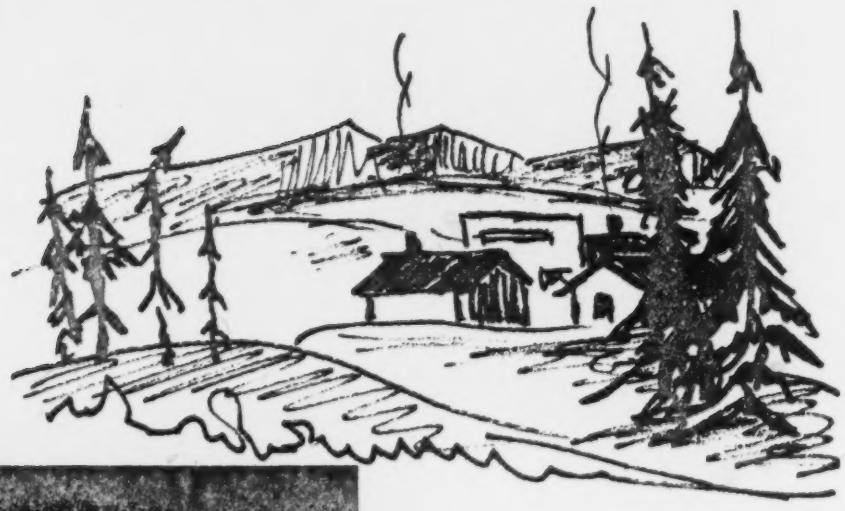
1. Richard P. Dober, <u>Environmental Design</u> (New York: Van Nostrand Reinhold Company).

have horrified men of past ages. The next period in our history may well be one of construction and technical progress, but all this great creative effort will be of little value to us if we cannot learn to control the shapes and patterns which form the background of our lives. It is now more important than ever that we should learn to understand the basic laws of the world around us, the man-made world and the world of nature, for the visual impact of our surroundings has a deep and lasting effect on us all."

Kurt Rowland, Looking and Seeing #1 - "Pattern and Shape", London: Ginn and Company Ltd., 1967.



3. RELATED READINGS AND RESEARCH FINDINGS

The analysis of urban aesthetics is relatively new and to a certain extent, a rather unique art form in that the urban form is determined by many factors and rarely is it the work of a single designer. Kevin Lynch, in his classic, The Image Of The City, was one of the first to attempt to record the design image of the city. Lynch proposed that clarity or legibility of the cityscape is a crucial factor because the ease with which parts of the city can be recognized contributes to the security of the inhabitants. When various images within a city have good legibility, it can then be said that such a city has high imageability. Examples of cities which possess qualities that provoke strong images are: Venice, Paris, San Francisco, Victoria, B.C., to name a few. To augment the analysis process, Lynch evolved a simple way of recording the design image of the city by reducing the vocabulary of large-scale design to five elements: paths, edges, nodes, districts, and landmarks. Lynch stresses that no element exists in

isolation and that a city will have greater imageability when each of these elements reinforces one another. This concept of images leads to a notation system which can record the existing images so that designers can sensitively place new elements either to reinforce the old or to contrast it. Both measures equally create a sense of place. Lynch and other designers are not sure that the form of the city can exhibit some gigantic stratified order, thus the quality of the total city pattern is dependent on the strength and imageability of the composite parts. Strong imagery of the sectors of the city also contributes to the orientation and personal identification, and perhaps is the basis of citizens' pride in their community. Kevin Lynch has devised a notation system which is a way of becoming more sensitive to the subtle aspects of the designed environment.

Other writers have expanded Lynch's ideas. Myer Wolfe discusses or identifies four physical/visual inadequacies found in most cities. From these one can generate design objectives.

ORIENTATION - The physical form of the city, as a composition of many urban elements, should contribute a force that will assist both the visitor and resident in travelling through the city with a minimum of confusion and mental stress. Furthermore, the form should attempt to give the citizen the opportunity to comprehend visually the city and orient himself within it as a part of his daily life.

LEGIBILITY - A person should be aware of entering and leaving the city; a strong differentiation should exist between urban and rural activities.

IMAGEABILITY - The city form, elements of which can be easily organized into a mental picture, has the quality of imageability. A form which is quickly and accurately recalled is said to have high imageability.

SITE UNIQUENESS - The physical form should enhance the unique natural and man-made characteristics of the site. The retention of unique man-made and natural characteristics and the achievement of their potential are essential to creating and maintaining an image of the city.

Wolfe, who is the co-author of the book, Urban Design Within the Comprehensive Planning Process, believes that urban planners might also consider the aesthetic implications inherent in design decisions which are often derived from determinants such as tax laws and regulatory measures. He subscribes to the idea that urban aesthetics is not a cosmetic but is built-in. Considering then that

urban beauty happens inadvertently, Wolfe points out various aesthetic factors which could be worked within the planning process. Wolfe urges planners to consider the necessity of visual access to various urban amenities such as lakes, waterfronts, parks, or major landmarks. He implores designers to consider the aesthetic dimension of portals to the city because they are the source of first impressions and for this reason they should impart a sense of entrance to the city. The visual importance of paths can be heightened by the use of plantings, street furniture, and other fenestration or decorative elements. Much of Wolfe's writings are concerned with the effect various urban images, such as skyline, landmarks, nodal points and pathways, have on identity, meaning and orientation. Since Wolfe is an urban planner, his immense consideration of urban aesthetics within the planning process makes his contributions unique.

Gordon Cullen's book, Townscape, suggests that the urban environment is often perceived as a panorama, a vista, or a skyline. An impressive skyline should create, according to Cullen, a sense of "thereness' in that it is perpetually out of reach and it is always there. He also concerns himself with the element of urban motion which he suggests can be brought about by changes of level. Cullen points out that to be above the datum-line produces feelings of authority and privilege, and to be below imparts the feeling of intimacy and protection. Other contributing factors to a good townscape are street lighting, railings, enclosures, focal points, and the clever placement of street furniture.

Much of Ivor de Wolfe's writings augment what Cullen has to say. De Wolfe has investigated the aesthetics which are common to most Italian towns, and in his book, The Italian Townscape, he relates that techniques such as skytrapping (caused by architectural structures enclosing or framing a portion of the sky) and sky piercing (accomplished by various architectural units having parts which jut into the sky) can bring about an awareness and an appreciation of the sky's many moods. Pathways in Italian towns are often very exciting because they have been treated as a way through instead of a through-way. The promise of more around the bend leads normally to anticipation and this is often achieved by such design techniques as the undulating wall, folding screen, and the Y trap to name but a few. De Wolfe's strongest emphasis is on re-alerting the eye to see the furniture of the street--traffic signs, awnings, lamposts, trees, pavings, railings, and any other street objects as the urban bric-a-brac of Man's collective environment. His book profusely illustrates how so often the Italian townscape exploits the use of water as a source of motion and as a foil to modern pressures.

Lawrence Halprin's writings are similar to those of Cullen and De Wolfe in that he dwells extensively on the aesthetics of nodal points such as waterfronts, central parks, and shopping streets. He describes how focal points, floor texture and overhead motion such as flags, banners and awnings can impart a sense of place. He has carefully examined the use of water and the change of elevation in various urban settings.

Victor Gruen, the famous American shopping center designer, incorporates many of the ideas of Cullen and De Wolfe in his redesigning of nodal points. His plans for Fulton Way in Fresno, California, include the use of sculptures, trees, hanging gardens, benches, fountains, and colorful flags and banners. Gruen's book, The Heart of the City, also probes various social and economic determinants which must be considered in urban design.

Jane Jacobs, who now lives in Canada, often draws out design implications from sociological studies. According to her and other researchers, people love the sight of activity and the sight of people attracts still other people. Therefore, it is essential that urban gathering places be visually and socially exciting. Jacobs believes that short blocks accompanied by visual interruptions and irregularities can contribute to this excitement. Jane Jacobs is known for her book, The Death and Life Of Great American Cities.

One of the latest writings by Bernard Rudofsky has probed the aesthetics of the streetscape. According to the card index of the fifteen-odd million volumes in the Library of Congress, no book was ever written about the street proper, pedestrian or otherwise. This is a remarkable omission, considering that a good part, often the larger part, of the city consists of streets. Rudofsky's book, Streets For People, is an indictment of the American citizens' lack of a sense for streetscape. Having lived in the world's great cities, Rudofsky gives specific examples of streets made interesting by the use of arcades, color and texture under foot, changes in elevation, canopies and other overhead decorations such as the paper decorations in Alcudia, Spain, banners and flags in Osaka, and the triumphal arches of every Italian town which are lit on special holidays. Without proffering panaceas or theories, Rudofsky's admirably illustrated book opens new vistas to the reader that he will not be able to put out of his mind.

Perhaps Donald Appleyard has probed the nature of streets and path design on a larger scale. Appleyard's research deals extensively with the aesthetics of highway design and the resulting image disclosure. He claims that there is a parallel of the concept of image disclosure to the unfolding of a novel. There must be a plot, causality--or lack of it, conflict or resolution. Likewise, a well-designed path will cause an arousal or

expectation by a glimpse of the future destination, perhaps a backward look over what has happened, and then a careful revealing of the city accompanied with mystery and surprise. Appleyard continues his probe of the kinesthetic experience which accompanies one on a trip through the city. He reveals that such urban motion can impart a feeling of freedom and that there are at least three ways in which this sense of motion is obtained. The first is self-motion which is the realization of motion through several senses--visual, tactile and auditory. This can be caused by the feel of surface texture; like grass, cobble, microclimatic changes; like gusts of wind, radiant heat, or cool shadow. The second type of motion is apparent motion resulting from the observer's change of position. This occurs when one moves through the city in a car or subway, or as one changes elevation by means of stairs, ramps, and the like. A foreground blur moves across from the background, objects loom up, swing and turn, and complex movements of the road can turn the entire scene into a choreographic wonder. A third type of motion suggested by Appleyard is that of real motion of the environment--the movement of people and traffic swarming, milling, and gathering. Both Ivor de Wolfe and Donald Appleyard contend that pigeons, fluttering flags, bubbling fountains, trees bending in the wind are all examples of real urban motion.

Another important element of urban aesthetics is scale. Many architects and urban planners include some mention of it in their books. According to Bruno Zevi, author of Architecture As Space, scale means dimension with respect to Man's visual apprehension, dimension with respect to Man's physical size. Hans Blumenfeld has dealt extensively with the question of scale and he declares that human scale in civic design in terms of visual form occurs when the human person is visible. In addition to human scale there are other scales such as super-human or monumental. Blumenfeld points out that even tall buildings or large gathering places can retain a human scale when the space is broken up and becomes visually busy and thus less monumental. The use of window frames, balustrades, fenestration, wall murals, sculptures, gargoyles and the like all contribute to the sense of human scale. Hans Blumenfeld, who lectures at the University of Toronto, has produced several writings on the topic of scale in civic design.

Related to human scale is the question of psychological space. Many design implications can be drawn from the works of Edward T. Hall, The Hidden Dimension, and Robert Sommer, Personal Space. These books contain research writings on the analysis of socio-psychological need for space of different culture groups. These findings add a new dimension to the concept of human

scale. Here is just a sampling of some of their exciting discoveries.

> Space allocation not only indicates status but also reinforces it.
> Subjects will place themselves closer to a large photograph where the eyes are closed than to one where the eyes are open.
> A driver can make another exceedingly nervous by tailgaiting--there should be a space cushion.

Sommer and Hall begin to explain why some places are more comfortable than others.

Faber Birren, a psychologist, color scientist, and designer, is famous for his research on the effect color has on the human organism. Birren has proven that red quickens the pulse; time is overestimated in a red room while it is underestimated in a blue or green one; a yellow-green interior in an airplane is more likely to induce nausea than any other color; good smelling colors are pink, lilac, orchid, cool green, and aqua blue; good tasting colors are vermilion, orange, warm yellow, pale cool green, and tan; and people become thirsty and restless in an orange-red room. All of these findings, (and there are many more) suggest qualities which have implications in environmental design. Birren's research can often explain for example, why a gathering place or shopping center may or may not be inviting.

In the Design of Cities, Edmund Bacon illustrates that each culture and each age produces a special vision, the total of which becomes a design heritage. Bacon explores the historical development of the use of color, pathways, focal points, landmarks, and shape in the urban form. He does not reveal a set formulae about how to design the space occupied by man but a set of attitudes about how to arrange the elements in the environment to achieve a satisfying and rewarding human habitation. In addition, he stimulates the understanding of the form of present day cities in terms of historical forces.

Sibyl Moholy-Nagy, a foremost expert of architectural history, presents the urban forms of man not as a monument to the past but as a continuously self-creating human effort to shape an image of society and its collective aspirations. In her book, The Matrix of Man, she surveys geomorphic and concentrei environments, several of the grand plans for the world's major cities such as Wren's plan for London, L'Enfant's plan for Washington, D.C., and Haussmann's plan for Paris. Finally, Moholy-Nagy probes the aesthetic implications of Konwiarz's plan for Hamburg, Montreal's Habitat, and the futuristic pyramid housing cluster for 2000 people designed for Siberia to name only a few.

Kurt Rowland has also investigated the historical development of the shape of towns dwelling precisely with the medieval, Renaissance, Baroque, industrial, and present day towns. Rowland believes that town design is more than a matter of finding solutions to a number of organizational problems and that it requires above all an artistic solution. He warns that countless people may be adversely affected by a single designer's miscalculation or insensitivity. In the design of towns this effect is magnified. Industrially produced objects have a limited life and are eventually superseded by new and more efficient objects, but townscape by its very nature is slow to change. Any mistakes in its design are difficult to eradicate and may spell misery for a generation or more. What is worse they may through their damaging effect on the human organism so stifle or permanently distort the normal exercise of the senses that improvements are neither demanded nor initiated.

The foregoing summary is, of necessity, only an initial look at what research is available; it is in no sense meant to be exhaustive. At its best it represents a few of the high points in the readings on urban aesthetics.

The following bibliography is divided into two parts: special readings which contains most of the books dealing precisely with the topic of urban aesthetics, and general readings which contains supportive material.

A. Special Readings

Appleyard, Donald; "Motion, Sequence and the City", The Nature and Art of Motion. Gyorgy Kepes, editor. New York: George Braziller, Inc., 1965, pp. 176-192.

A brilliant analysis of self and actual motion which can be found in cities and could be put to better use for kinesthetic purposes.

Ashirhara, Yoshinobu. Exterior Design in Architecture. New York: Van Nostrand Reinhold Company, 1970.

A well-illustrated book which deals with outside space and specifically with scale and texture.

Bacon, Edmund N. Design of Cities. New York: The Viking Press, Inc., 1967.

A well-illustrated description of the handling of urban space, motion, landmarks and color in historical and contemporary cities.

Birren, Faber. Principles of Color. New York: Van Nostrand Company, 1969.

One of the few books which applies the psychology of color to the realm of urban design.

Blumenfeld, Hans. "Scale in Civic Design", The Modern Metropolis--Its Origins, Characteristics, and Planning. Paul D. Spreiregen, editor. Montreal: Harvest House, 1967, pp. 216-234.

A careful description of super and human scale in terms of urban design.

Chermayeff, Serge and Christopher Alexander. Community and Privacy. Garden City, N.Y.: Doubleday and Company, Inc., 1963.

A valuable contribution to the study of the requirements of public and private spaces and the inherent design implications.

Cullen, Gordon. Townscape. London: The Architectural Press, 1961.

One of the first great works on the elements and principles which can make a townscape aesthetically appealing.

de Wolfe, Ivor. The Italian Townscape. London: The Architectural Press, 1963.

A profusely illustrated analysis of the nature of townscape offering excellent examples of skytrapping, urban motion, focal points, light and shadow, and street furniture.

Dober, Richard P. Environmental Design. New York: Van Nostrand Reinhold Company, 1969.

Excellent sections on design structure, a sense of place and a discussion of the urbanographical approach of Cullen, Lynch and Thiel.

Donat, John. World Architecture, Four Place and Environment. London: Studio Vista, 1967.

This book has several portions which deal specifically with the aesthetic appeal of contemporary public spaces.

Friedberg, M. Paul. "Projects for Urban Spaces", Design Quarterly, 77, Walker Art Center, 1970.

A survey of several contemporary well-designed public spaces.

Gruen, Victor. The Heart of Our Cities. New York: Simon Shuster, 1964.

A general treatise on the nature of public shopping spaces by an authoritative writer in the field.

Hall, Edward T. The Hidden Dimension. Garden City, New York: Doubleday and Company, Inc., 1969.

A revolutionary insight to the question of human scale in terms of public spaces with reference to cultural differences.

Halprin, Lawrence. Cities. New York: Reinhold Publishing Corporation, 1968.

A predominantly visual presentation of factors which embellish the images of the city--street furniture, trees, the use of water, and changes in elevation.

Jacobs, Jane. "Downtown is for People", The Exploding Metropolis. The editors of Fortune. Garden City, New York: Doubleday and Company, Inc., 1958.

An excellent article on the topic of streetscape and its various aesthetic qualities.

Kepes, Gyorgy. Nature and Art of Motion. New York: George Braziller, Inc., 1965.

A most enlightening pursuit of the question of light and motion and how these elements could be exploited on the urban scale.

Lynch, Kevin. The Image of the City. Cambridge: M.I.T. Press, 1960.

A comprehensive description of the elements of townscape which includes paths, edges, nodes, landmarks, districts and the principles of imageability and legibility.

Moholy-Nagy, Sibyl. Matrix of Man. New York: Frederick A. Praeger, 1968.

An illustrated history of urban environment written by an eminent architectural historian who discusses urban form determinants through the ages.

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5 - Some Contemporary Examples
6 - Land Form, City Life and Urban Design
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10 - Regulation and Control
11 - Government and Urban Design
12 - Comprehensive Role of Urban Design

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Catalogue of Films

re: Housing
Planning
Environment
Construction
Architecture
Urban Improvement

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4. CURRICULUM MATERIAL TO BE DEVELOPED

A. Problem Selected: The broad area selected is urban aesthetics. During our deliberations of 1970-71, we have come to the conclusion that the best way to develop this sight and insight is through the criterion of IMAGEABILITY or through the conceptual development of the visual components of an urban area. We hope to make students aware of the visual form of any city through units entitled:

UNITS	ELEMENTS OF DESIGN

Images *

1. Portals
   -Points of access, or entrance to a city, district or area
2. Skyline and Profile
   -Panorama, vista or profile of the city
3. Focal Point and Landmarks
   -An element which stands out against the background
4. Nodes
   -Strategic spots, junctions, gathering places
5. Pathways
   -Streets, rivers, railroads, or any other traffic pattern
6. Edges and Entities (districts)
   -Boundaries, roads, shores, railroads, etc. that segment a city
7. Aura and Pulse (sensual)
   -The total sensual impressions of a given area

The concept of the function of images and elements of design in terms of human values.

- Scale
- Color
- Line
- Form
- Texture
- Motion

* For a more complete definition of each of the seven images, see Appendix A.

Each unit will have built into it development of the basic concepts or elements of Art and Design. (eg. line, form, texture). Some units lend themselves to a greater use of certain concepts or elements of Design. For example, Skyline and Profile would see a greater concentration of the elements of "line" and "form".

We envisage, within each unit a format for the development of two concept areas (concepts of images and concepts of elements of design) within the framework of human values. The development of the concepts would begin from the base of the students' home, therefore moving from that which a student knows best to transferring those concepts to <u>seeing</u> a city.

<u>Example</u> - Nodes: "Nodes are the strategic foci into which the observer can enter, typically either junctions of paths or concentrations of some characteristic. But although conceptually they are small points in the city image, they may be in reality large squares, or somewhat extended linear shapes or even entire central districts when the city is being considered at a large enough level."

Kevin Lynch - <u>The Image of the City</u>, page 72

In the home, nodal areas could be identified as the kitchen, living room, or any area where the family converges for specific functions. We would hope to design material to transfer the concepts related to nodes and elements of linear form to a consideration of the city's shopping centres or squares or malls or traffic junctions.

B. <u>Grade Level, subject areas, length of time, and transferability</u>

The project planners envisage a modular structure of units comprising specific images by which to view any city. (eg. portals, nodes, skyline). Each module would be an entity and could be used in classrooms as a small two or three week unit. However, other units of images could be interlocked to provide a more comprehensive total image of the city. The depth of awareness would be proportionate to the number of units included in the students' program. With this flexibility, the total program, utilizing all units, could range from a five to ten month period, or a single unit could occupy as short a time as two or three weeks.

Basically, the material would be designed for the vocabulary ability of Jr. High School but due to the unique approach through images, a curricular area formerly reserved for advanced studies in urban planning. Because of the visual rather than verbal approach to the understanding of images as well as the emphasis on the student viewing his own urban world, we believe that the material would have universal appeal to any learner above the grade six level.

By the same token, we envisage utilization of the curricular material in many existing subject areas in Junior and Senior High Schools in Canada. There are strong implications for Art Education, Social Studies, Sociology, Geography, Home Economics, and Environmental studies. To a lesser degree some units could be utilized in programs of Drafting, Design studies, Literature, Building arts and History.

Since the images are universal and identifiable in every urban locale of man, both present and past, the curriculum materials can be applied in any urban area on the face of the globe. Similarly, they can be applied to any size of urban development.

In summary, we believe we can design materials which can be broadly utilized on many grade levels, in numerous current subject areas, in any classroom in urban Canada, for long or short periods of the school year.

C. Teaching Strategies

From a teacher's point of view, the teaching for the Face of a City curriculum will fall into two areas. The first area involves the development of concepts of the various images of a city and the related elements of design. The second area involves the application of these concepts to the students' own environment, that is, his own city.

These two areas of strategy will be found in each unit. The topic of each unit is an image concept of a city. These images are: portals, skyline and profile, focal point and landmarks, nodes, pathways, edges and entities, and aura and pulse (sensual). The elements of design will not be taught in every unit; rather, the various elements will be included in units as the elements prove necessary. Eventually, all the elements of design will have been introduced. These elements are: scale, color, line, form, texture and motion.

1. To teach the image concept of a unit and to teach the element (s) of design necessary to deal with that image concept, the teacher will use prescribed curriculum materials. These will take the form of a kit which the students will work through in order to discover the concepts of image and design included in that unit. The learning experiences necessary for the learning of the concepts of the unit will be entirely self-contained in the kit. In this way, the concepts can be learned without relying totally on the teacher who may not feel comfortable or even competent in teaching elements of design or any image of a city.

The use of the prescribed area of a unit should take a minor portion of the time to be spent on the unit.

The material in the kit will begin by showing the image and design concepts of a unit as they apply to homes, the neighborhoods and then to a city as a whole.

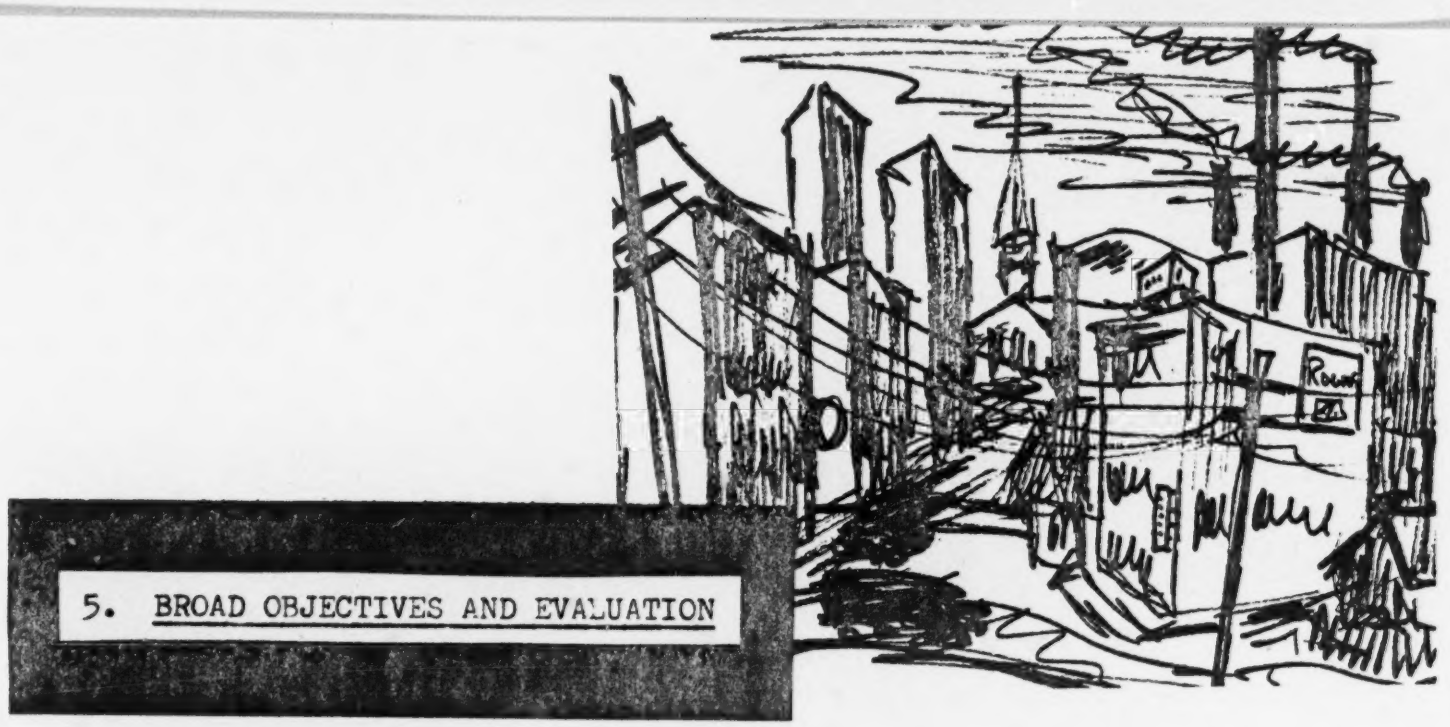
This prescribed work, all done in a classroom will provide the conceptual basis for more open inquiry on the topic of a unit.

2. This leads to the second area of teaching strategy--the application of image and design concepts learned in the first area.

Here learning will not be from a prescribed kit but rather the learning will be open to student inquiry. The Face Of A City curriculum will only describe a number of ideas for activities which can lead to student inquiry. The stress here will be on student investigation of his own community. The open-endedness of the teaching strategy in this area would allow for value choices on the part of the student.

The procedures used in this area should involve application of the image and design concepts of a given unit to the school, the home, the neighborhood and then to the entire town or city. The exact nature of the activities used in this application will be student-directed and teacher-co-ordinated. These may involve photography field trips, observation trips along pathways, model designing, redesigning of a community or other experiences to help students become aware of the images of their city.

In summary then, the teaching strategy is prescriptive in order to teach basic concepts and then very open-ended in applying these concepts to any given urban environment.



5. BROAD OBJECTIVES AND EVALUATION

I Broad Objectives

A. Knowledge Objectives

1. To know and use the vocabulary of the elements of design (shape, color, line, texture, motion, scale).

   To know and use the vocabulary implies the understanding of the concepts inherent in these elements.

2. To be able to identify and describe the components of specific urban images (portals, skyline, profile, focal point, landmarks, nodes, pathways, edges, districts, aura).

   The student must be able to identify the presence of and the lack of these images.

3. To know and identify the expression of human values or human priorities in an urban setting.

   The student must become aware of the political, historical, economic and social forces which are at work within a city.

4. To be familiar with the criteria for evaluating the aesthetic qualities of an urban environment.

5. To be able to describe the aesthetic quality of urban images using the elements of design.

B. Intellectual Abilities and Skills

1. To make judgements about aesthetic expressions.

2. To synthesize the elements of an urban environment so that the city can be seen as an art form.

C. Affective Objectives

1. To be aware of the city as an art form or to be aware of the aesthetic qualities of the urban environment.

2. To be curious about other urban areas.

3. To desire aesthetic quality in the urban environment.

4. To believe that individuals and the public can influence the urban image.

5. To be committed to a life of involvement in urban affairs.

II Evaluation

If we accept Alkins concept of evaluation requirements for program planning, the presentation of this proposal represents two major decisions and therefore has involved two kinds of evaluation. 1. Since we have selected an appropriate problem in urban aesthetics from a number of alternatives we have, during the past year, been evaluating areas of concern and the objectives to be served by various alternatives.

By the same token, we have been involved in deciding the selection and design of the curriculum materials and teaching methods which would best meet the objectives decided upon. We have attempted to evaluate, within the frame of reference of our own teaching experience and present educational theory, teaching strategies to best accomplish the established objectives. Due to the lack of any school programs in the area of urban aesthetics or even adult programs in the area, we have determined the curriculum design base of imageability on very limited data.

During the next phase of our project when pilot programs are being introduced we will find it necessary to invent vehicles to assess the operation of the program in light of the manner intended, to assess if the program is geared to the vocabulary and interest of Jr. High students and to assess if the student can transfer the concepts (images) from the theory level to his own community. Cognitive instruments could be designed to measure the level of knowledge attainment as units are introduced for piloting. The project designers would like to develop pre and post test instruments such as Kevin Lynch's questionnaire to assess attitudinal changes in aesthetic awareness. In some

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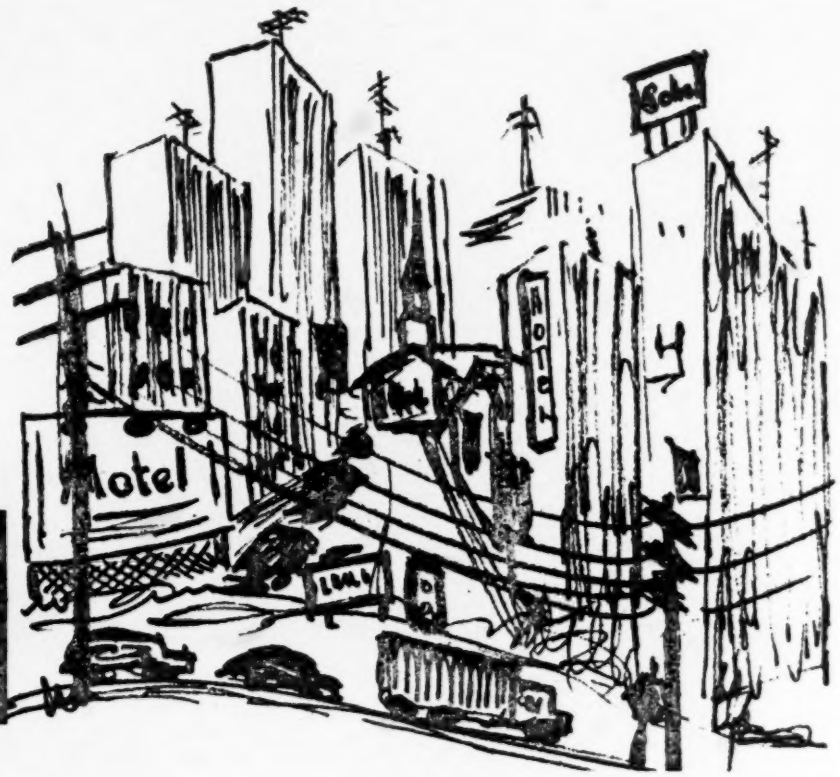
1. Marvin C. Alkins, Products of Improving Educational Evaluation, B. C. Teachers Federation, P.D. - 70 - 342.

way we must try to measure the teacher level of awareness and its effect on the objectives of the program. We have a belief but very little evidence that the general classroom teacher has thought little about his city as an art object and would be unable to add an enrichment dimension to the program or might even impede the attainment of the desired objectives. If this is true, the program will have to concern itself with pre and in-service training. Evaluation will occupy much of our time in the next phase and our present proposal would be revised in light of our findings.

At this point we have given little thought to evaluation of the final product's generalizability within the total educational process (Alkins - outcome evaluation for program certification). It is too early in the development of the project to be concerned with this phase of evaluation, beyond the fact that we are aware of its necessity.



6. PROJECT TEAM REPORT

A. Evaluation of Team Development

1. Conceptual Development

The initial approach to this project began with the Doxiadis model as a framework within which to study the aesthetics of the urban environment. This was to be a modular format which was broken down into the study of the shells Man lives in, traffic and networks, commerce, parks and recreation. Human values and the elements of design were at the core of the various systems which all interacted with one another. Other units which could be added were: shells for learning, society, government, pollution and natural resources.

It was soon to be seen that this 'shell' approach was architecturally biased and did not serve as an appropriate framework in which to develop the aesthetic elements of townscape. For example, some of the world's most exciting streets and public spaces do not have impressive architecture. Consequently, this approach was replaced by one which was influenced by the Philadelphia Project. The following is an outline of the second basic framework:

Man Builds His City

1. to sustain his Human Needs
   (a) physical needs
   (b) psychological needs

2. to Meet the Environment
   (a) size of man (human scale)
   (b) land
   (c) climate
   (d) building materials
   (e) technology of building

3. to Serve His Daily Activities
   (a) transportation
   (b) communication
   (c) recreation
   (d) occupation

This too, had limitations in that it was difficult to draw out aesthetics when the emphasis was so very much on human values. It was, in addition, rather unwieldy and too all encompassing.

Under the influence of Dr. Stanley King and Professor Wolfe, the team was able to narrow the scope to an approach which became, paradoxically, more universal.

It was decided that by an investigation of the aesthetic qualities of the images of the city, a hitherto neglected area of study could be brought into the school. Too often the art program does not teach this way of looking at the city. Kevin Lynch's format was a basis of departure, in that it accorded a simple way of recording the design image of the city. While Lynch reduced the vocabulary of large-scale design to five elements: paths, edges, nodes, districts, and landmarks, the team chose a slightly expanded framework influenced by the works of later urban designers such as Gordon Cullen, Donald Appleyard, Philip Thiel, Ivor de Wolfe, and Bernard Rudofsky. The final format then will probe the aesthetic attributes of portals, skyline and profiles, focal points and landmarks, nodes, pathways, edges and districts, and aura or pulse. The evaluation of the quality of these images will be in terms of scale, color, line, form, texture, and motion. Each concept will be developed with reference to the home as a point of departure. It was agreed that the modular approach be retained.

2. Procedural Development

The team was made up of members of two different subject areas--art and social studies. Consequently, it was necessary to have an adjustment period whereby there could be established a common understanding and vocabulary upon which to progress. This in itself resulted in substantial growth for all members. Paradoxically, the diverse background of the team resulted in a strengthening rather than an inhibition of the project development. Part of the group's success in adjusting is due to the fact that an

entire year was allotted for the development of the rationale. This is most commendable and seems to take into account the need for an adjustment period.

It was agreed by the team members that Project Canada West must set guidelines but that rigid limitations are undesirable and can at times impede creative effort on the part of the team. However, it was found that it was essential for the team members to draw up clear contractual arrangements between themselves as well as with consultants with specific recommendations as to who is in the group. At the same time the group found its relations strained with one employer--the Calgary Public School Board. It is important the school boards understand the goals of Project Canada West. This particular committee attempted to repair relations but its position with the Calgary Public School Board is still precarious.

Throughout the year, several guest speakers were imported and it was found that it was advisable to have an immediate follow-up meeting to discuss the various ideas which were brought up at such a time. In fact, a dictaphone or some other recording device could retain many valuable ideas which are often dropped in the course of conversation.

It would be very beneficial to have a project office whereby each member could have accessibility at any time, to all the journals, books purchased to date. This has proved to be most useful.

It was the concensus of the group that block meetings lasting up to four or five days could yield a consistently higher quality of work particularly when developing unit material. Much time is spent in reacquainting oneself with the topic of discussion when the meetings are far apart.

The principal sources of ideas are usually books and magazines, but at times it would be advisable to obtain first hand knowledge of ideas by travelling to locations where valuable urban studies and design projects are held provided they are within reasonable proximity. For example, this particular team could gain much by visiting several public squares and malls in Western Canada.

Three members of the group who attended an international educational conference in Dallas, Texas, came back with slides which would aid in illustrating several of the concepts of images which will be developed. The environmental education sessions in Dallas provided an excellent opportunity

to find out what other groups were doing in the development of materials. Generally, most of the projects on urban aesthetics followed either a very traditional art approach or an ecology-oriented approach operating on the funds of the U. S. Environmental Bill. While the sessions revealed several approaches to the handling of visual materials, no other project is attacking aesthetic education in terms of urban imageability. In this way it would seem that this particular project is unique.

The team's meeting in Calgary with twenty specialists, including ecologists, biologists, architects, educators, city planners, geologists, and geographers, resulted in a feeling of encouragement. At the conclusion of the meeting each one has suspended his narrow approach and supported the necessity of the development of <u>awareness</u> as the primary step in the education of all urban and future urban dwellers.

B. <u>Future Plans for Development</u>

Phase I
June 1970 - June 1971 - A period of adjustment followed by a period concerned with developing, or mapping out, a long range plan. The ultimate objective was the development of the completed proposal for presentation on June 23, 1971.

Phase II
June 1971 - June 1972 - <u>Developing the Materials</u>
This will entail developing the first draft of 2 or 3 units, and then adding subsequent units while piloting the initial units.

A second draft will be developed of these units once they have been piloted in a few classrooms. Throughout this phase, evaluation by substantive people, as well as curriculum people, will be a built-in factor.

Phase III
June 1972 - June 1973 - Continued Development of Materials
This phase will necessitate the piloting of the total program, with continuous revision taking place in all sub-units. Field trials will take place subsequent to some teacher education and evaluation by substantive and curriculum people.

Phase IV
June 1973 - June 1974 - Production Phase
Major emphasis at this time will be the final development of materials and the instigating of In-Service Programs. The evaluation activities initiated in Phase II and Phase III will undoubtedly continue through the early stages of Phase IV.

Budget - July 1, 1971 to June 30, 1972

Proposed Budget:

1.	Release time substitutes*	$1,500.00
2.	Honoraria, gratuities for resource assistance	$1,000.00
3.	Materials, library, photography, stenographic, films, printing of initial curriculum materials	$2,500.00
4.	Pilot release time, seminars for pilot teams, administration of piloting, evaluation of pilot experiences	$2,000.00
		$7,000.00

*The Calgary project team has experienced difficulty in getting release time from the Calgary Public System. It is doubtful that the project can progress unless there is more release time from teaching and administrative duties. In 1971 the team spent 9 Sundays in all-day meetings in order to accomplish their task.

APPENDIX "A"

Images of the City - Definitions

1. Portals

The portals, or entry point, to the city (airport, railway station, bus depot, highway entrance) are the source of first impressions of the city. As these are the places through which people pass, they should be aesthetically accountable, should impart a definite "sense of entrance" and should present an aura of welcome or invitation. Portals may similarly apply to city districts or areas.

2. Skyline and Profile

The urban environment is often perceived as a panorama, a vista or a skyline. Some cities have a more impressive skyline than others (e.g. the Manhattan skyline, Italian hill towns). 'Sky piercing' and 'sky trapping' leads the eyes upward as does the Gothic spire. Skyline has a degree of identity, meaning and orientation for each locale.

3. Focal Points and Landmarks

Landmarks are external points of reference or orientation cues, quite often so sited that they assist in making pathway decisions. Some cities have been built around such focal points (e.g. an arch or an obelisk). A good landmark must have clear form and contrast with the background. The Eiffel Tower, the Peace Tower, and the Statue of Liberty are examples of some well-known landmarks.

4. Nodes

A node is a strategic foci or a junction and is usually a meeting point or gathering place. A good node should heighten urban congestion and multiply social contacts. Such gathering places should contain such items as sculptures, trees, hanging gardens, benches, fountains, and well designed street furniture (e.g. phone booths and litter boxes). Some outstanding nodes are Piazzo San Marco, St. Peter's Square or Centennial Square, while at a more local level, they may be city malls, shopping center malls or church squares.

5. Pathways

Pathways refers to the streets, rivers, railroads or any other traffic pattern. Pathways are often the predominant element in the recall of images, especially if an effort has been made to heighten the visual importance of a movement path.* A well-designed pathway will cause an arousal or expectation by a glimpse of the future destination, perhaps a backward look over what has happened, and then a careful revealing of the view ahead.

*The importance of pathways must not be overlooked--for if pathways look interesting, the city looks interesting; if they look dull, the city looks dull.

6. Edges and Entities (Districts)

Edges are area boundaries, while districts are areas of common character. The sense of a district can be reinforced by a strong edge. Good edges should be visually prominent, continuous in form and in keeping with the character of the district. Edges may be natural--shores, banks or hills, ravines, or man-made - railroads, roadways, walls, parks; making the boundary to such districts as Chinatown, industrial areas, commercial areas or residential districts.

7. Aura and Pulse

Aura and pulse refer to the total sensual impressions of a given area. A place which has a strong aura or pulse would probably incorporate such elements as color and form psychology, sound, tempo, pace, and smell. There would be a high degree of legibility of images evident.